

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 24 AND BEL AIR SOUTH PARKWAY IN HARFORD COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A SOUTHBOUND MD 24 DOUBLE LEFT TURN LANE AND WILL CONSIST OF THE REPLACEMENT OF VEHICLE DETECTION. MD 24 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 24 AND SIDE STREET SPLIT PHASING. AN ALTERNATE PEDESTRIAN CROSSING PHASE IS PROVIDED FOR THE SOUTH LEG OF MD 24. THIS PHASING WILL NOT CHANGE.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A POLE MOUNTED CABINET WILL BE USED.

CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MRS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 321-2781

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 321-2761

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 321-2841

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
CHIEF SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
CHIEF SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
CHIEF SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

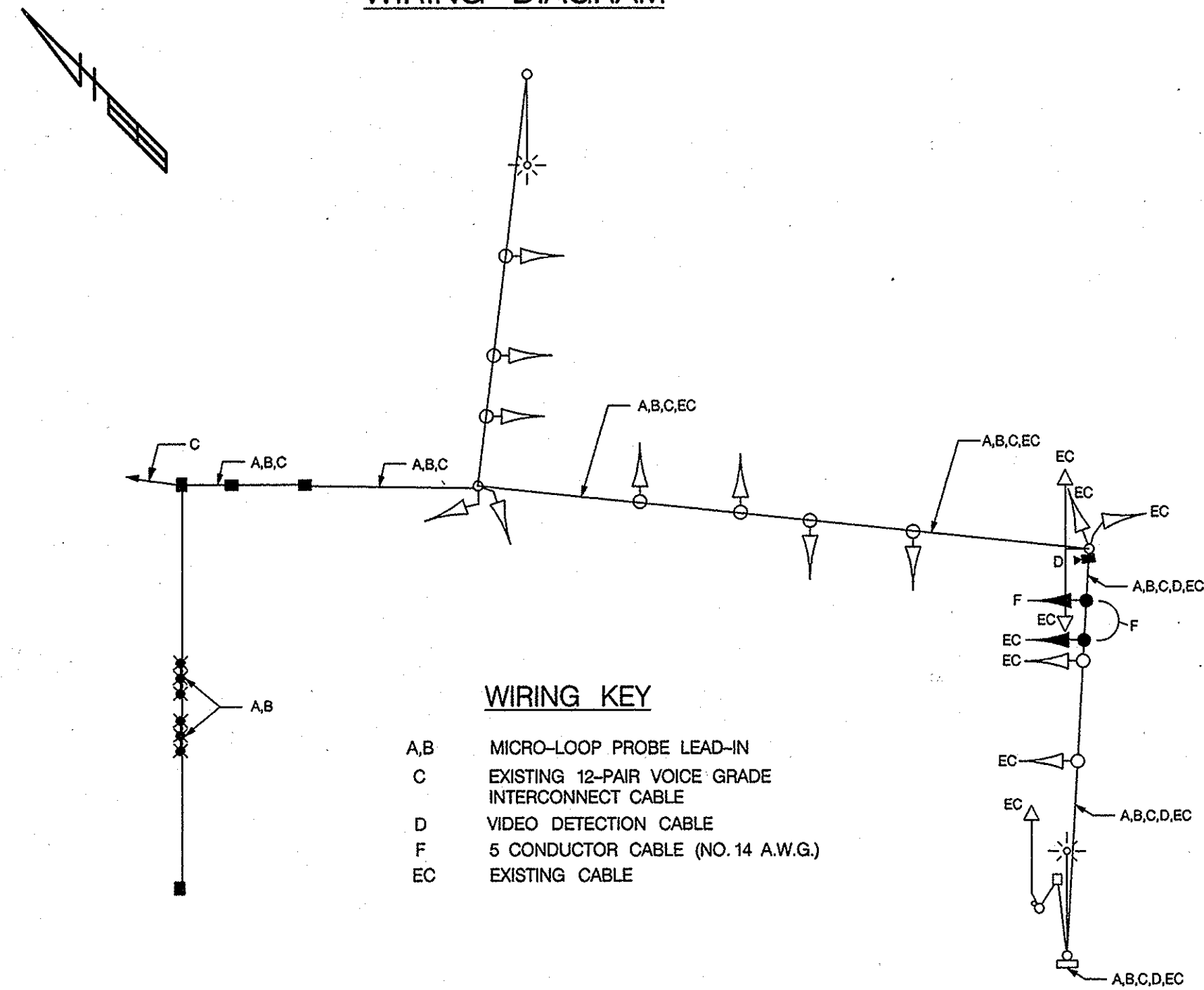
EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
LS	MOBILIZATION
LS	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
900 LF	DISCONNECT, PULL BACK AND REROUTE EXISTING INTERCONNECT CABLE
* 2400 LF	12-PAIR VOICE GRADE INTERCONNECT CABLE
600 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
80 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
4 EA	ELECTRICAL HANDHOLE
2 EA	MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
1 EA	ECONOLITE VIDEO INTERFACE EQUIPMENT RACK
1 EA	ECONOLITE "TERRA" VIDEO DETECTION CAMERA WITH 200 FT. LEAD-IN CABLE
25 LF	24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
20 LF	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
2 EA	12" L.E.D. 3-SECTION SIGNAL HEAD (RA,YA,GA) WITH SPAN WIRE MOUNTING HARDWARE
2 EA	SHEET ALUMINUM SIGN R3-SL (30" x 36") SPAN WIRE MOUNT
1 EA	12" L.E.D. 3-SECTION SIGNAL HEAD (RA,YA,GA) WITH POLE MOUNTING HARDWARE
1 EA	STEEL CABLE BACK-GUY AND ANCHOR

* THE QUANTITY FOR NEW 12-PAIR INTERCONNECT CABLE IS A CONTINGENT ITEM. THE CONTRACTOR SHOULD ATTEMPT TO DISCONNECT, PULL BACK, AND REUSE THE EXISTING CABLE.

WIRING DIAGRAM



WIRING KEY

AB	MICRO-LOOP PROBE LEAD-IN
C	EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE
D	VIDEO DETECTION CABLE
F	5 CONDUCTOR CABLE (NO. 14 A.W.G.)
EC	EXISTING CABLE

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASING CHART

PHASING CHART

BECOME THE EXPERT

Diagram showing 19 traffic light phases with their corresponding light states (Red, Yellow, Green, Flashing Green, Flashing Yellow, Flashing Red, Flashing White, Flashing Blue, Flashing Purple, Flashing Orange, Flashing Green, Flashing Yellow, Flashing Red, Flashing White, Flashing Blue, Flashing Purple, Flashing Orange, Flashing Green, Flashing Yellow, Flashing Red, Flashing White, Flashing Blue, Flashing Purple, Flashing Orange).

PHASE 1 + 5	←G→	←G→	←G→	R	R	←G→	←G→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 + 5 CHANGE	←Y→	←Y→	←Y→	R	R	←Y→	←Y→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 + 6	←R→	←R→	←R→	R	R	←G→	←G→	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	←R→	←R→	←R→	R	R	←Y→	←Y→	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 5	←G→	←G→	←G→	G	G	←R→	←R→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
5 CHANGE	←Y→	←Y→	←Y→	Y	Y	←R→	←R→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 6	←R→	←R→	←R→	G	G	←R→	←R→	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
2 + 6 CHANGE	←R→	←R→	←R→	Y	Y	←R→	←R→	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	←R→	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
3 CHANGE	←R→	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4	←R→	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	R	R	R	R	R	DW	DW	DW	DW
4 CHANGE	←R→	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 ALT	←R→	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	R	R	R	R	R	FL-WK	FL-WK	FL-WK	FL-WK
PED CLEAR	←R→	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	R	R	R	R	R	FL-DW	FL-DW	FL-DW	FL-DW
4 ALT CHANGE	←R→	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	R	R	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

TRAFFIC CONCEPTS, INC.

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN MD 24 AND BEL AIR SOUTH PARKWAY

SCALE NONE DATE 12-8-08 CONTRACT NO. BW998M82

DESIGNED BY J.K. SCHMID COUNTY HARFORD
DRAWN BY J.K. SCHMID LOGMILE 12002406.56
CHECKED BY T. ZAYDEL T.I.M.S. NO. J-432
F.A.P. NO. N/A TOD NO.

DRAWING NO. TS-2571 SHEET NO. 2 OF 2

FILE PATH: \$FILES
DATE: \$DATES